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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,309	12/05/2003	Gregory M. Dobbs	965-009 Con2	2175
20874	7590	04/15/2005		
WALL MARJAMA & BILINSKI 101 SOUTH SALINA STREET SUITE 400 SYRACUSE, NY 13202			EXAMINER FLANIGAN, ALLEN J	
			ART UNIT 3753	PAPER NUMBER

DATE MAILED: 04/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/729,309

Applicant(s)

DOBBS ET AL.

Examiner

Allen J. Flanigan

Art Unit

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 37-52 is/are pending in the application.
- 4a) Of the above claim(s) 39,40,44,45 and 48-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 37,38,41-43,46 and 47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Applicant's election of the species of the Fig. 7-10 heat exchanger, combined with the membrane of Fig. 13, in the reply filed on 2/18/2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 39, 40, 44, 45, and 48-52 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 2/18/2005.

Claims 37, 41, 42, 43, 46, and 47 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, 3, 6, and 7, respectively, of U.S. Patent No. 6,684,943. Although the conflicting claims are not identical, they are not patentably distinct from each other because the only real distinction seen in the claims is the limiting of the claims in the instant application to random hydrocarbon copolymer materials for the membrane (the patent recites the Markush group of "block" or "random"). Since the patent covers both possibilities, granting of claims in the instant application would unlawfully extend the patent monopoly by withdrawing subject matter covered by the patent claims from the public domain. The claims also differ in the use of the term "at least partially" prior to "sulfonated", but no distinction is seen because the patent claims are not

considered to be limited to “fully” sulfonated, and the disclosure indicates that the invention includes membranes that may be “fully or partially sulfonated”.

Regarding claim 41, the Examiner takes Official Notice that the use of crossflow heat exchange core designs for “total” (heat and moisture) heat exchangers is notoriously well known in the art, to the extent that citation of a reference is considered unnecessary. *In re Malcolm*, 54 U.S.P.Q. 235.

Claims 37 and 38 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 41 and 45 of copending Application No. 10608809. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

The claims are deemed to be drawn to the same invention, although worded slightly differently. Claims 41 and 45 of copending Application No. 10/608809, for example, fail to expressly recite a “first passageway and a second passageway” as recited in claims 37 and 38, but such structure is implicit in any “core” in which heat and moisture are transferred between a “first stream” and a “second stream”. To all intents and purposes, such transfer requires the formation in the core of some sort of passageway for the streams for exchange to occur. Thus, the recited passageways are considered to be implicitly part of the scope of claims 41 and 45 of copending Application No. 10/608809. The only other difference between the recited claims is the recitation of claim 38 that the membrane is “permeable to water vapor”. This,

again, is deemed to be merely a recitation of an inherent property of the claimed membrane material.

Claim 41 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 41 and 45 of copending Application No. 10/608809. Although the conflicting claims are not identical, they are not patentably distinct from each other because as noted above, the use of crossflow designs for total heat exchangers is well known in the art. See the Official Notice taken by the Examiner in the above rejection of claim 41 over claims in US patent # 6,684,943.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 37 and 38 of this application conflict with claims 41 and 45 of copending Application No. 10/608809. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

It is noted that claims have been presented in copending Application No. 10/608809 in an attempt to provoke an interference with US 6,413,298. There

appears to be at least some overlap with claims 37 and 38 of this application and the patent claims, in that the patent claims would represent a subspecies of the material recited in claims 37 and 38, limited to "statistical" (i.e. random) copolymers "having at least one arylvinyl monomer and at least one olefin monomer". Per MPEP 709.01, should an interference be declared, any overlapping claims in this application may be rejected "over the counts of the interference and in the event said claims are not canceled in the [instant] application, prosecution of said application should be suspended pending the final determination of priority in the interference. >See MPEP § 2315.01.<"


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sheikh-Ali et al. teach the use of a sulfonated statistical (random) copolymer as an ion conducting exchange membrane. Chabert expressly recognizes the equivalence of the terms "statistical copolymer" and "random copolymer", as implied in Shiekh-Ali et al. The remaining references were made of record in the parent application, or in related copending application 10/608809.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen J. Flanigan whose telephone number is (571) 272-4910. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on (571) 272-4930. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Allen J. Flanigan
Primary Examiner
Art Unit 3753

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